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Does 'Good Government' Draw Foreign Capital? Explaining China's Exceptional Foreign Direct Investment Inflow

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Abstract

China is now the world's largest destination of FDI, despite assessments highlighting its institutional deficiencies. But this FDI inflow corresponds closely to predicted FDI flows into China from a model that predicts FDI inflow based on government quality indicators and controls and is estimated across a sample of other weak-institution countries. The only real discrepancy is that, if government quality is measured by constraints on executive power, China receives somewhat more FDI than the model predicts. This might reflect an underestimation of the strength of these constraints in China, a unique institutional setting for FDI operations, FDI based on expected future institutional improvements, or a unique Chinese model of development. We conclude that Ockham's razor disfavors the last. We also note that FDI may be elevated because Chinese institutions protected foreign firms better than domestic ones.

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1. Introduction

China now receives more foreign capital in the form of foreign direct investment (FDI) than any other country, despite ongoing and sometimes vociferous criticism of the quality of its government in the foreign media. This is curious because foreign direct investment involves much irreversible fixed investment, which is sensitive to investors' perception of public policies and property rights. This study examines how the quality of China's government affects its allocation of FDI, and whether or not China's inflow of FDI is in some sense "exceptional" given the quality of its government.

In this paper, we show that China's FDI inflow goes disproportionately to provinces that have better institutions. We then show how the allocation of inward FDI across countries correlates with three key dimensions of "good government." These are

1. *The general quality of government*. To measure this, we use appraisals of official respect for private property rights, freedom from official corruption, and the quality of public investment in infrastructure.
2. *The strength of constraints on executive power*. Here we again use appraisals, but focusing specifically on the freedom of action the country's institutions accorded to its head of government. Intuitively, constraints on executive power prevent a country's head of government from ruling by decree, arbitrarily nullifying or modifying contracts and property rights, or capriciously altering the rules of the economic game in other ways. If legislatures must be consulted and court rulings must be sought before such actions can be taken, the future policy direction will less likely to be arbitrary and opportunistic. This variable captures how dependent the quality of government is on the decisions of the head of government and his immediate associates.

3. *The government's track record*. A government that has generated impressive economic growth in the past is likely to interest foreign investors regardless of outsiders' appraisals of its institutions. We therefore consider past economic growth as an implicit measure of government track record. Since past policies are most useful in predicting the future in countries with stable governments, we also include past government stability as a variable in our analysis.

Within this framework, we show that China's track record of past growth goes far in explaining the magnitude of its FDI inflow, despite offsetting deficiencies in the quality of its government. This framework, estimated using country-level FDI inflows and national government quality measures, is applied out-of-sample to predict the allocation of FDI inflow to China, given analogous measures of its quality of government. The errors in this out-of-sample prediction exercise are comparable to those in the initial cross country data used to calibrate the model.

Repeating this exercise using different subsets of our "quality of government" measures is also instructive. If we calibrate the cross-country model using only "control of corruption" from the *International Country Risk Guide* (ICRG), China actually seems to attract appropriate levels of FDI. But if we calibrate the model using only measures of the "strength of constraints on executive power" or "responsible government", China seems to attract "too much" FDI.

We draw three conclusions from these results:

1. "Good government" and expectations of stable and strong economic growth attract foreign direct investment. China's large FDI inflow, interpreted in this light, is not mysterious. Indeed, if China had higher quality government, it would attract even more foreign direct investment.
2. The dimensions of "good government" that matter to FDI inflow do not seem to include general measures of the quality of government – limits on corruption, expropriation risk,

government contract repudiations, and the like – but do include gauges of the way the country's government functions – and especially on how limited executive powers are.

3. We find that measures of the strength of executive constraints predict a lower FDI inflow for China than we observe. This might imply that part of China's FDI inflow is in some sense "exceptional". But more prosaic explanations also present themselves: the strength of checks on executive power in China may be underestimated; or FDI investments may be subject to atypical institutional environments within China; or FDI may reflect expectations about future institutional reforms along this dimension.

While data problems caution against overstressing this third conclusion, we suspect such misperceptions may well be systematic in China's case. In exploring these issues, we note that deficiencies in China's institutional environment that disadvantage local firms relative to foreign controlled operations may well deter domestic entrepreneurs to the relative advantage of foreign investors. Any elevation in China's FDI inflow then reflects structural inefficiency – foreign controlled operations doing what domestically controlled firms might do given better institutions – rather than an intrinsic contribution of FDI to growth. If this explains the third point above, Chinese exceptionalism is hardly a role model for development. (See Huang 2003.)

In the next section, we motivate our research question. Section three describes our research issues, while sections four and five present our Chinese and cross-country analyses, and section six fits China within the latter. Section seven discusses our results and what they imply about FDI flows and China's institutional environment, and section eight concludes.

2. The Issues

The importance of sound institutions to economic development is now received wisdom. Solid property rights protection and respect for the rule of the law are viewed as basic factors that determine macroeconomic stability, capital market development, business sector development,

and investment in innovation - see La Porta *et al.*(1998), Acemoglu *et al.* (2003), Durnev *et al.* (2004), Acemoglu *et al.* (2005), and many others. The successful development and maintenance of sound institutions is therefore now seen as a critical function of government; indeed, as a fundamental test of "good government".

From this perspective China's economic growth seems a puzzle. China features a one party political monopoly. By most reckoning, democracy and political transparency are not integral to the Chinese polity. Stories of corruption, scandals, and embezzlement starring government bureaucrats, bank executives and corporate insiders contribute to a general perception of weak property rights. More formal evaluations of the quality of Chinese institutions concur with these impressions.

Table 1 shows China's sandwiched just above a cluster of Latin American countries and just below the former East Bloc states in terms of its respect for the rule of law and limits on corruption. But China's growth outpaces both of these other regions.

This success understandably draws economists, such Allen, Qian, and Qian (2005) and others, to envision a "Chinese model" of development that permits vigorous growth despite feeble institutions.

But Table 1 also sounds a note of caution. China's *per capita* GDP is markedly lower than the averages for either the East Bloc or Latin America. This low starting point gives China more room than most countries to grow simply by catching up. Even though many equally poor countries do not manage to grow rapidly, a low starting point makes China's rapid per capita GDP growth rate less impressive: any capital allocated to any entrepreneur may well generate quick economic growth.

A full analysis of the importance of political economy to economic development is clearly beyond the scope of this study. We focus on only one factor of economic development – inward FDI flow – and thus investigate only one small part of a greater picture. We adopt this focus because investment is a key determinant of growth. Foreigners' capital is more footloose

than domestic capital, and is thus more sensitive to outside opportunities. Foreign investment ought therefore to be more sensitive to institutional deficiencies.

If foreign capital flowing into China is unaffected by the institutional factors that determine the allocation of foreign capital elsewhere, there may well be a distinct "Chinese model". But if the same determinants affect FDI allocation in China as in other countries, Chinese exceptionalism is rendered dubious. Of course, its domestic savings might still be allocated uniquely; but even if this were so, our study narrows the scope for any possible Chinese singularity.

China surpassed the U.S. as the world's largest FDI recipient in 2001. But China is a very large country – economically, geographically and in terms of population. Comparisons across countries must be scales by country size. Table 1 shows that China's inward FDI as a fraction of GDP is still higher than that of both Latin America and the former East Bloc. But when FDI is scaled by population, China fairs notably worse. This makes sense because China's low *per capita* GDP makes its inflow of FDI appear large, just as China's rapid per capita GDP growth rate is possible, in part, because of its extremely low starting point

Figure 1 pursues this issue further. Before 1990, China's FDI fails to surpass the world average, regardless of whether it is expressed *per capita* or as a fraction of GDP. But as China embarked upon a series of reforms during the 1990s, its FDI inflow surged. From 1990 through 2003, China's FDI inflow averages 4.3% of its GDP – double the world's average of 2.1%. But, China's FDI inflow *per capita* remains quite low. Even the highest level it achieves in Figure 1, about US$40 per capita, is only about one-fifth of the world average. The world mean is heavily skewed by the highest income countries, such as Canada, the U.K. and the U.S. When judged against benchmarks representing other countries with low starting points, China looks better. For example, China exceeds by 50% the average FDI per capita of the countries ranked in the lowest forty percent by institutional development, which we define below.

Thus, whether China's performance is exceptional or not depends critically on how it is measured, against what benchmarks it is compared, and how much of China's economic performance is "easy growth" as China makes up for decades of stagnation under Maoist socialism.

But let us accept that China's ability to attract FDI is of economic interest, and seek an economic explanation of it. Given this motivation, we use a straightforward empirical specification to consider two questions:

1. Is China's FDI allocation affected by government quality?
2. Is China's FDI allocation explained by the same factors that explain FDI allocation elsewhere in the world?

To lay the groundwork for answering these questions, we next consider the determinants of FDI inflow.

3. FDI Allocation in the Global Economy

The literature on FDI, though voluminous, points us towards a relatively simple generic empirical specification.

The starting point of the modern FDI literature is the Coasean *Theory of the Firm*, as set forth in Coase (1937), Caves (1971), Buckley and Casson (1975), Caves (1982), and others. In essence, prospective multinational firms are envisioned as possessing information-based firm-specific capabilities that they could profitably apply in foreign countries. Agency problems, information asymmetries, and property rights protection problems that render information based assets inalienable prevent these firms from selling or leasing those capabilities to foreign firms. To profitably apply their unique capabilities abroad, multinationals have resort to establish controlled foreign operations – to engage in FDI. In short, a range of market failure problems force multinationals to opt for integration over arm's-length transactions.

Yet, capturing the returns to more expansive applications of their capabilities does not necessarily entail establishing a foreign operation. For example, exporting is an obvious alternative. The literature thus suggests that so-called *horizontal FDI* occurs if exporting is blocked by economically significant trade frictions that stem from transportation, information, and coordination costs and from policy restrictions.

Profitable application of a firm's capabilities abroad can stem from exploitable international factor-price differences. For example, American firms might establish operations in China to access cheap labor, land, or capital there; these inexpensive factors can be profitably combined with their intangibles. So-called *vertical FDI* is aimed at accessing inexpensive inputs or capabilities that are location specific (See, e.g., Markusen 2001.)

Hanson *et al.* (2001) show that horizontal and vertical FDI are both prevalent. In either case, FDI is an investment like any other in the sense that it aims to capture positive net present values (NPVs); that is, quasirents. The net present value of a corporate investment project depends not only on the project, but also on the capabilities of the firm contemplating it. And these, in turn, often depend on public policies. For example, factors like the quality of laws, the security of property rights, and the viability of public infrastructure, broadly interpreted to include educated workers as well as good roads, often affect the value of a business and also the desirable mode of operation.

More specifically, the location of a firm's operations is thought to depend on a range of economic and public policy conditions. The NPV a firm sees in a generic investment depends positively on product and factor market development, growth potential, and the availability of financing. It depends negatively on market risks and the costs of doing business. The last is especially emphasized, with contributing factors including: high taxes, high wages relative to productivity, and generally poor infrastructure.

Caves (1982) draws attention to economy size in this context. A larger economy gives investment projects with high fixed cost components higher NPVs; so FDI inflow, all else equal, should be larger into larger economies.

Coughlin, Terza, and Arromdee (1991) provide empirical support for these factors influencing inward FDI, though they do not consider financial development. Froot and Stein (1991), while showing that undervalued host country currencies attract inward FDI, also stress the barriers firms confront in raising capital to finance any new investment projects. These barriers are particularly daunting for domestic firms in economies with underdeveloped capital markets. In such countries, foreign firms could have an advantage in capturing the NPVs of new investment projects because of their access to better functioning foreign capital markets (Foley, Mahir, and Hines, 2004).

All these factors, including the development of the financial system, depend on an economy's institutional environment – its rules, regulations, and informal codes of behavior. As emphasized above, sound and well-enforced rules and regulations, like property rights protection and information disclosure, encourage economic development in general and capital market development in particular (La Porta *et al.,* 1997 and 1998; King and Levine, 1993). The reason is that these rules and regulations constrain opportunistic behavior and build transactional trust between parties (North 1991).

However, establishing and administering sound rules and regulations requires "good government". The quality of the government thus matters. Governments that are less corrupt, have more efficient bureaucracies, and that impose less burdensome regulations foster economic development. Alfaro *et al.* (2005) show that weak institutions explain why very little capital flows from rich to poor countries. Globerman and Shapiro (2002) show preliminary evidence that FDI flows towards locations with a sounder governance infrastructure, which includes how well the legal system enforces contracts and protects property rights, how free the government is from corruption, and how efficient the government is; that is, how well regulators and other

bureaucrats avoid imposing unnecessarily burdensome regulations[1]. Their result could reflect countries with better institutions having strong growth opportunities, which attract FDI.

Governments are, of course, staffed by people. Sound institutions require high quality government, and this requires high quality politicians and government employees. Just as good corporate executives are products of good internal corporate governance, high quality politicians and civil servants arise from sound public institutions. This circularity can lock in either good or bad government.

What sort of circle a country fits into is a key determinant of its attractiveness to foreign firms undertaking FDI. Transparent and orderly political competition and constraints on executive constraints seem paramount. Acemoglu and Johnson (2005) find stronger constraints on government associated with less corruption and with more predictable policies and regulations. They unbundle institutions into those protecting contracts and those protecting property. The former institutions facilitate contractual arrangements between transacting parties. The latter constrain public officials from acting arbitrarily for personal gains. Investment and growth appear better explained by the latter, while the former primarily influence only the forms of contracting that occur.

Constraints on executive power are particularly worthy of attention when we examine countries that recently feature phenomenal growth. These countries, of which China is one, need external capital to capture their growth opportunities. To attract foreign capital, their governments should be particularly enthusiastic about implementing and enforcing property rights, honoring policy commitments, and avoiding burdensome regulations. But foreign investors' concerns are often not such governments' current stances, but how they might act once the investments are in place, especially should growth and investment opportunities become less abundant. Constraints on executive power prevent heads of government from abruptly altering

[1] Their empirical results, however, do not control for expected growth. The institutional factors could be proxies for expected future growth, or reflecting that a government behaves when it expects future growth opportunities and thus the need for foreign direct investments.

property rights, revising policies, reneging on commitments, and capriciously imposing new regulations. In short, they prevent short term actions, like precipitous expropriation, in the event of a negative shock. Executive constraints, especially if safeguarded by political competition, should reinforce the attractiveness of current business opportunities to foreign direct investment by providing credible assurances about the permanence of those policies.

Finally, the cost of doing business in any country depends on intangible factors – the mentality of its residents. Ample empirical evidence shows that "culture" affects economic outcomes by affecting economic agents' prior beliefs, preferred economic activities, and political choices. For a comprehensive and informative survey, see Guiso, Sapienza and Zingales (2006). Mostly recently, Siegel, Licht, and Schwartz (2006) show that attitudes (in this case, attitudes towards egalitarianism) affect cross-border economic exchanges because they affect how people interact and negotiate on economic matters. A huge management literature emphasizes how the commercial success of FDI hinges on how well a firm protects its property rights and overcomes a range of agency and information asymmetry problem – foreign investors are particularly handicapped to achieve these goals. Consequently, if locals make transparent and predictable use of norms, or established legal and political institutions, to adjudicate disputes, this liability of being foreign diminishes and FDI flows in more abundantly.

In summary, inward FDI is attracted by basic sets of economic and institutional factors. The economic factors include the size of the market, expectations on growth, normal costs of doing business such as labor and input costs, infrastructure development, and financial market development. Obviously, the host country's currency may affect foreign firms' local input factor costs. The institutional factors include general measures of "good government" such as the public's attitude towards law and order, the quality of government bureaucracy, and the efficiency of the legal system, as well as specific factors like the strength of constraints on executive power.

4. The Allocation of Foreign Direct Investment across China

This section examines the distribution of inward FDI in China, and how it is related to the quality of government.

Our key dependent variable is province-level inward FDI, denoted *FDI*, taken from China's *Statistics Yearbook*, defined as "investment by foreign companies and individuals". Unfortunately, "foreign companies" include Chinese firms registered abroad. Also, the "investments" include foreign loans taken out by firms undertaking State-approved investment projects. This noise is unavoidable, for these data are the best available.

Our key independent variables gauge the "quality of government" in each province. They are from surveys of firms' experience with property rights protection and corruption.

Private legal property right protection is from a city by city survey in which business executives are asked: "In disputes that your company was involved, what was the likelihood that the property and contractual rights get legal protection?" The answer can range from 0 to 100%, and our variable is the average of answers across surveyed companies sorted by the province of their headquarters' city. City averages are aggregated to provide province-level data.

To measure corruption, we use *entertainment and travel costs* – 2003 data on the proportion of company expenses classified as "entertainment and traveling costs" expressed as a fraction of sales. Cai, Fang and Xu (2005) show that this number is higher in cities with worse bureaucratic burdens. While these costs erode earnings, they presumably also function as bribes and bring benefits that are higher in cities with worse bureaucratic burdens and worse government services. Hence, the data capture bribery payments to "grease" a corrupt government's "grabbing hand". In other words, the variable could reflect a government's discretionary power.

Figures 2 and 3 reveal that firms located in slower growing provinces spend more on entertainment and travel; and that executives in those provinces also believe legal protection to private property rights to be weaker. Figures 4 and 5 show these same measures of institutional

quality similarly correlated with economic growth. Not only do weak institutions correlate with poverty, they also correlate with retarded growth.

All of these correlations are statistically significant at standard confidence levels save one, the correlation between private property rights and per capita GDP growth. However, this is due to a single outlier – Inner Mongolia. Once that outlier is deleted, the positive relationship is also statistically significant.

FDI should correlate with per capita GDP, and with these institutional development variables as well because the latter reflect growth potential. Figures 6 and 7 graphically represent the relationships between our government quality measures and FDI as a fraction of GDP after partialing out the effect of GDP per capita. These graphs show that private property rights protection is insignificantly positively associated with FDI (the correlation coefficient is ρ = 0.0679, the probability for rejecting the null hypothesis of no correlation is p = 0.47) while entertainment and travel costs are significantly negatively associated with FDI (ρ = -0.275, $p <$ 0.01). The analogous simple correlations, without partialing out GDP per capita, are 0.0314 (p = 0.74) and -0.340 (p = 0.0002), respectively. These preliminary results suggest that within China inward FDI has the tendency to by-pass provinces whose governments have much discretionary power and yet is only weakly associated with legal protection for private property rights.

Ideally, our next step would be to conduct multiple regressions that capture the relationship between inward FDI and our government quality variables controlling for the level of general economic development, infrastructure, wages, size, taxes, and the like.[2] Unfortunately, such an approach does not produce statistically reliable results because the control variables are highly correlated and our sample size is limited by the number of Chinese provinces. Panel data are of limited help because we still have only one year's worth of government quality variables.

To overcome these obstacles, we therefore turn to cross-country analysis.

[2] For example, we might control for size by scaling inward FDI by GDP. We might use GDP per capita or average wage levels to control for general development and also wage level. We might use the length of roads scaled by a province's geographic size to proxy for infrastructure development.

5. The Allocation of Foreign Direct Investment across Countries

This section examines the international allocation of inward FDI, as tabulated the World Bank WDI database. Our dependent variable is per capita FDI in constant 2000 US dollars, winsorized at the tail 1 percent.[3] We add a constant to this quantity because some countries have negative FDI inflows (negative FDI inflow represents repatriation of previous investment).[4] Dropping the negative FDI inflow observations leads to qualitative similar results. However, we are not aware of significant economic reasons to exclude the observations.

Our intentions are twofold. First, we wish to further investigate our thesis that "good government" attracts FDI. Second, we wish to see if the FDI flowing into China behaves similarly to that flowing into other countries.

To these ends, we regress each country's FDI inflows on a set of country characteristics associated with the quality of government. We exclude China from these regressions and then ask how well the estimated parameters explain FDI flowing into China.

FDI is large if foreign corporate investors regard a location's investment opportunities highly. Obviously, investment opportunities are more abundant in locations with better institutions, where government officials are not corrupt, bureaucracies are efficient, and the rule of law is generally upheld. At the same time, positive shocks on investment opportunities often entice governments seeking to attract foreign capital to provide these institutions. Hence, a simple relationship between measures of government quality and foreign direct investment could be misleading. At the very least, to sort this out, our empirical investigation should incorporate a proxy for the presence of profitable investment opportunities.

[3] The winsorization is done to prevent the influence of huge outliers and measurement errors. This variable is highly skewed. The one percentile value is -79.0, while the 99 percentile is 1064.0. The minimum is -2615, and the maximum is 259837.

[4] In total 6.3% of the observations are negative. We add 80 to FDI per capita so that the minimum of the winsorized FDI per capita is 1.

Corporate investors' inclination to invest in any such opportunities depends on their expectations about how well the government is likely to behave over the operational lifetime of the investment. In particular, foreign investors' property rights are particularly vulnerable to partial, or even complete, expropriation by host country governments. Savvy foreign investors are therefore at least as worried about future government behavior as about current policies. Fiscal stress or political reorientation can easily transform a country's business environment from welcoming to overtly hostile. Ideology can drive such transformations, but so can short-term political opportunism.

The purpose of constraints on executive power is to prevent abrupt changes in policy without due political debate and at least a degree of consensus. In the absence of such constraints, currently attractive institutions are in danger of being radically and unpredictably transformed should the country get a new head of government with new policies and priorities, different ethical standards, or a different level of affection for foreign investors.

Given these considerations, we evaluate each country's quality of government with the variables gauging the strength of constraints on executive power, the general quality of government, and the government's track record as regards its economy.

We use two variables to capture the strength of constraints on executive power:

*Executive constraints***,** from the Polity IV database, ranges from 1 to 7. It is composed of indexes that gauge barriers to political entry (monarchy through dictatorship to open entry), the nature of political transitions (orderly or military), and the selection of successors (genetics through appointment to open election). This variable therefore captures the strength of institutionalized constraints on the decision making power of a country's chief executives. The larger the number is, the stronger the constraints.

Responsible government is constructed from the Polity IV database and rates each country on a democracy-autocracy scale. First, in the data base an autocracy variable is available, ranging from 0 to 10, with a larger number indicating a more autocratic government. Also

available is an analogous democracy index ranges from 0 to 10, but with a larger number means a more democratic government. Our *responsible government* variable is the democracy index minus the autocracy index, a measure called *polity2* in the database. It captures the extent to which a political regime is responsible to its people, the larger the number the stronger the democratic checks on the political system.

In addition to our executive power limitation variables, we consider a range of measures of the more general quality of government. Two of these are explicit appraisals of the country's quality of government:

Rule of law is an ICRG survey result gauging the state of law and order in each country. It ranges from 1 to 6, with higher values connoting greater general respect for the rule of law.[5] It contains a law component, which captures the strength and impartiality of the legal and political establishment in judicial matters, and an order component, which captures the extent to which residents of a country accept established legal and political institutions as the solely legitimate way to make and implement laws and to adjudicate disputes.

Control of corruption is also from the **ICRG** survey on the likelihood that government officials illicit side payments for their private pockets. This variable characterizes the extent to which corruption is controlled. It ranges from 0-6, and a higher value means a better control over corruption.

We use another set of variables to capture the track record of the government in terms of fostering investment opportunities. These are:

Expected growth is the country's *predicted* real per capita GDP growth rate based on linear regression of the past five year's growth rates. We interpret a high past growth rate as both indicative of profitable investment opportunities and a track record of the country's government fostering, or at least not impeding, their exploitation.

[5] ICRG data has the advantage of covering the majority of countries from 1982 on. For details, see Knack and Rahman (2004) or www.prsgroup.com.

Macro volatility: the standard deviation of per capita GDP growth over the prior five years. More unstable economic growth, all else equal, is likely less conducive to FDI, and less indicative of sound and predictable government policies.

We also include a set of variables commonly used elsewhere in the literature (See e.g. Coughlin et al. 1991). These are: *country size*, measured as the log of total population; *infrastructure* quality, represented by telephones per 1000 residents; *overall development*, gauged by log per capita GDP in 2000 constant US dollars at PPP; and *education*, measured by the log of the average years of schooling completed by the country's average resident. In addition, we incorporate the percent of GDP accounted by manufacturing and services because manufacturing and non-manufacturing sectors attract different FDI flows. Clearly, larger countries, all else equal, ought to attract more FDI because their larger markets facilitate economies of scale. Better infrastructure, education attainment, and general development all make a country more attractive to FDI.

We also include each country's currency *exchange rate* relative to the US dollar, all normalized by the rate in 2000. This means that a higher value of *exchange rate* implies a more depreciated local currency. Countries with undervalued currencies, all else equal, attract more FDI (e.g., see, Froot and Stein, 1991).

While we introduce these variables as *controls*, they are also, in part at least, reflections on the quality of each country's governments. Better governed countries typically have more telephones per capita, more educated people, and currencies that better hold their values. Population, even, is not entirely unrelated to the quality of government, for emigration is a common response to misrule.

Finally, we must be concerned with how well current government quality predicts future government quality. Policies attractive to FDI may be of little effect in a country that undergoes coups every year or two. Corporate investment projects commit firms to operating in a host country for years, even decades. For example, oil exploration, development, and exploitation

often have present value adjusted payback periods measured in decades. Foreign firms must be convinced that friendly policies are likely to continue, sometimes for very long periods, before FDI looks financially attractive.

To capture *regime durability*, we take from the PolityIV database the number of years since the country's most recent regime change. A "regime change" is not a simple change in leadership or parliamentary majority. Rather, a "regime change" is defined as a change of three-points or more in the country's *responsible government score (*polity2 in the database) within a span of three years or less. Or, a regime change is defined as the end of unstable political institutions characterized by foreign invasions or anarchy.

Our ultimate objective is to see whether Chinese FDI inflow is "exceptional", or follows patterns similar to FDI flowing into other countries at similar levels of development. This is important because a marginal institutional improvement in Denmark is not necessarily comparable to a similar improvement in Indonesia. Going from one to two phones per Dane is not equivalent to going from zero to one phone per Indonesian. The former is likely inconsequential, while the latter could be highly important.

One way to deal with the problem is to introduce non-linear terms of institutional measures. That, however, would induce collinearity. Also, interpreting higher order terms of categorical variables can be tricky. Moreover, FDI flowing into less developed regions appears to have motivations (e.g. resource extraction) different than that flowing into highly developed economies (local market access).

We therefore instead choose a sample of benchmark countries that, collectively, resemble China. That is, we consider countries in which the impact of a marginal improvement in institutions on FDI is likely to be in the same range as in China. We thus select all countries in the bottom 40 percent of our institutional measures (e.g., the bottom 40 percent of "executive constraints"). The 40% cutoff is not critical. Rerunning our analysis using, e.g., a 50% cutoff instead, generates similar results.

Expectedly, the following 16 countries are included in our comparison sample of developing economies for the variables from the PolityIV database (i.e., when the institutional variables are executive constraints or responsible government): Benin, Chile, Ghana, Hungary, Iran, Jordan, Kenya, Mali, Mexico, Nicaragua, Pakistan, Rwanda, Senegal, Syria, Tunisia, and Uganda.[6] We use 32 countries for the ICRG-data-based regressions (i.e., when the institutional variables are the control of corruption[7]): Bangladesh, Bolivia, Cameroon, Colombia, El Salvador, Ghana, Guatemala, Haiti, Honduras, Hong Kong, India, Indonesia, Kenya, Mali, Mexico, Niger, Pakistan, Panama, Papua New Guinea, Paraguay, Philippines, Sierra Leone, Sudan, Syrian Arab Republic, Thailand, Togo, Trinidad and Tobago, Turkey, Uganda, Venezuela, Zambia, Zimbabwe.

Table 2 reports standard descriptive statistics for these variables across the relevant samples of countries.

Table 3 reports our cross country regression results. These regressions incorporate year fixed effects to absorb global macro factors. Because of expected serial correlations for observations within the same country, the standard errors are estimated based on country clustering.

The institutional measures of good government that capture the strength of constraints on executive power are statistically significant positive determinants of FDI. In contrast, the two variables related to general government quality (i.e., control of corruption and the rule of law) are not associated with significantly more FDI. These results show that conditional on government tract record and general development levels, limits on executive power indeed attracts FDI, yet many other aspects of general government quality do not seem to matter. These results are consistent with the emphasis in Acemoglu and Johnson (2005) – investment and growth appear positively associated with measures that constrain public officials from acting arbitrarily.

[6] In the case of executive constraints, Brazil is in, but Hungary is out.
[7] The list of countries when the institution is measured as the rule of law is similar but not identical, and is available upon request.

The variable indicating a high growth potential – expected growth – attracts a positive significant coefficient. Greater macroeconomic instability – indicated by a higher GDP growth standard deviation – attracts a significant negative regression coefficient. Overall, FDI responds to a government's track record. In this sense, good government again clearly attracts FDI.

Intriguingly, regime durability turns out to be insignificant. Interestingly, other variables are rarely consistently significant and robust. The two exceptions are, first, a higher telephone density is associated with more FDI inflow per capita, and second, a larger population is actually associated with a lower FDI inflow per capita. Since China has a particularly high telephone density relative to other similar countries, this infrastructure indicator has contributed toward China's high FDI inflow per capita.

6. FDI Allocation in China and the World, Compared

We now use our Table 3 results to predict FDI inflows for China from 1990 through 2003. This comparison is conducted in the last row of Table 3, which reports the mean prediction error for each regression. That is, we use China's right-hand side variables to predict its FDI inflow, actually to predict China's log(constant + *per capita* FDI), for each year from 1990 through 2003. We then compare each prediction with the actual value of this variable for China each year and calculate the average of these differences – the model's mean prediction error for China. The final row gives these test statistics.[8]

Figures 8 and 9 present some of the same information graphically, by plotting the prediction errors of regression 3.2 and 3.4, using *responsible government* in Figure 8 and *control of corruption* in Figure 9 to predict FDI inflow each year from 1990 to 2003 for China and a range of other weak-institution countries.

[8] While theoretically we can test the statistical significance of the mean of the prediction error, we have only 14 observed forecast errors (1990 to 2003) to carry out tests. We therefore show the readers directly all forecast errors and how they graphically compared to within sample estimation errors of other countries.

The global model "predicts" China's inward FDI flow reasonably successfully – the prediction errors are within the bounds set by those for other developing economies. More interestingly, when the institutional variable is responsible government, the prediction errors narrow down gradually, and near the end of the sample period, the prediction error is quite close to being zero. Equally impressively, when we use the control of corruption variable and its associated sample, the prediction errors for China are quite close to the zero line. Note also that the prediction errors for China are "out-of-sample" while the others are "in-sample."

This success of the cross-country model in predicting FDI inflow into China means China does not seem exceptional. Given China's phenomenal track record and nice infrastructure, it should draw in a huge amount of FDI.

And none of this in any way implies that the poor quality of some aspects of China's institutions is irrelevant. But for its poor institutional environment, China would have attracted even more inward foreign direct investment.

To illustrate, consider the coefficients on expected growth across the specifications in Table 3, which can be taken as roughly 2.3. China' *per capita* GDP growth rate in the past five years averages about 8.5% annually; while the average for the rest of the weak-institution world included in the table 3 sample is about 1%. Given the difference of 7.5% in growth rates, and the coefficient value of 2.3, China's inward FDI per capita *should* exceed that to the rest of the weak-institution world by about 76% if the latter is represented by the mean per capita FDI inflow for our sample of weak institution countries, $26.35.[9]

Now consider the *responsible government* measure. China's score is -7 and the weak institution world's average is 0.15. Analogous calculation shows that this institutional deficiency reduced China's inward FDI per capita by an economically significant -43.6% relative to what it

[9] The calculation is as follows: $\Delta\ln(80 + \textit{per capita}\ \text{FDI}) = 2.3 \times \Delta\textit{predicted growth}$; so $\ln(80+\text{FDIpc}_{\text{China}}) - \ln(80+\text{FDIpc}_{\text{weak institution controls}}) = 2.3 \times 7.5\%$ and therefore $\text{FDIpc}_{\text{China}}/\text{FDIpc}_{\text{weak institution controls}} = 15.06/\text{FDIPC}_{\text{weak institution controls}} + 1.188$. The mean of $\text{FDIpc}_{\text{weak institution controls}}$, is 26.35. Hence, $\text{FDIpc}_{\text{China}}/\text{FDIpc}_{\text{weak institution controls}}$ is 1.76.

would have been were China's institutions not unusually weak, even for a weak institution country.

In short, China is not an exception. China's high past growth and good infrastructure encourage FDI inflow; and its weak institutions in preventing policy reversal discourage FDI inflow. These effects are roughly in line with their operation in other weak institution countries.

7. Assessing Assessments of China's Institutions

The results in Table 3, nevertheless, show apparent systematic prediction errors. The last row in Table 3 shows that the errors are, on average, positive in regressions 3.1, 3.2, and 3.3; using executive power constraints, responsible government, and the rule of law, respectively, to gauge institutional quality. However, the prediction error is almost zero on average for regression 3.4, which gauges institutional quality (albeit insignificantly) by the *control of corruption*.

What are we to make of this?

China's *responsible government* index is invariant through the years we study at -7.0; while the rest of the weak-institution world manages a mean score of 0.15 ($\sigma = 6.83$). Since the variable theoretically can fall anywhere between -10 and 10, China's score is quite poor. Similarly, China scores a 3.0 in the *executive constraints* variable every year, while the rest of the weak institution world averages around 3.8 ($\sigma = 2.2$). This variable ranges from 1 to 7. These data clearly suggest that the assessment on the Chinese governments is that they do not face many constraints and that they face little competition, even compared to weak institution countries. Interesting, China's control for corruption score aligns roughly with the average for other weak-institution countries. And, China's *rule of law* index is 4.6 ($\sigma = 0.7$), while the rest of the weak-institution world manages an average of only 2.6 ($\sigma = 1.1$). The rule of law score theoretically ranges from 1 to 6. Thus, the performance of these indexes, benchmarked against the average of those from other weak institution countries, show suspicious variations. Why would China's low

responsible government and *executive constraints* scores not match its decent score on the *rule of law*. Could the former two be too low while the score on the rule of law too high? Note that the former two are based on "expert assessments" and the "rule of law" score is a survey result.

On being communist

Obviously, China's low *responsible government* score derives from being a communist country. But the Chinese Communist Party is far from homogeneous. It has multiple factions at both the central and provincial levels. This internal competition resembles, in some ways, the factional disputes in, for example Japan's Liberal Democratic Party. Just as LDP factional struggles constrained the Japanese prime minister's freedom of action, disagreements within the CCP constrain the discretionary power of China's top leaders. Although these disputes were present to some degree through most of the history of the People's Republic, the secretive and sometimes bloody power struggles of the 20th century seem to be giving way to more orderly ways of debating policy and handling, for example, the succession of power (see Keefer, 2006). Old impressions are difficult to change.

Perhaps China's leaders really don't have the same unbridled executive powers wielded by dictators in other parts of the developing world. If so, might China's *responsible government* score – and especially its *executive constraints* score – both in a genuine sense be "too low"?

On being foreign

What about the *rule of law* in China? And are foreign investors' experiences with the Chinese legal system, especially those covered in the mass media, really representative? We suspect that foreign investors may well have an overly rosy perspective for two sets of reasons:

First, the *rule of law* variable is a survey result, while the executive constraints variable is constructed mechanically based on the structure of each country's government. A survey variable,

of necessity, reflects foreign investors' post-entry rationalizations, rather than their pre-entry fears. By self-selection and through the power of cognitive dissonance, the former is generally more positive than the latter. Foreign investors who had excessively negative views are more likely to have stayed away, or left early. Those with excessively positive views are more likely to stay on, and having stayed on, to rationalize their decisions *ex post*.

Second, business-government relationships are highly heterogeneous across China. Surveys of foreign investors, who are active disproportionately in the more developed special economic zones and coastal provinces, may well have a more positive average experience than locals. (On the other hand, notice that the executive constraints and responsible government indices are for the whole of China.)

One country, many systems

The second set of issues merits further reflection. Section 4 shows that the corruption and property rights protection vary markedly from province to province, and FDI flows into provinces with higher quality governments. It might be desirable to divide China into smaller homogeneous regions, assign different index values to these regions, and observe whether the more refined regional indexes better explain China's regional FDI inflows. Unfortunately, measures of the rule of law, responsible government, the strength of constraints on executive power, and control on corruption in China are unavailable at the provincial level.

But there are other ways we might expand on this heterogeneity argument. Of special relevance to any discussion of FDI are different ways China's institutions might affect foreign firms versus domestic firms.

Various levels of Chinese governments often give preferential treatment to certain multinational firms (Huang, 2003). Thus, foreign-controlled operations might actually have genuinely more developed institutional environments than Chinese controlled operations next door.

Foreign operations in China are generally also fairly large-scale, and Chinese governments at all levels appear to treat large firms more deferentially than small firms. This sort of deferential behavior may well occur to different degrees in different parts of China. But it is probably important enough to systematically provide FDI operations a different institutional setting that many of their Chinese competitors.

Even among Chinese firms, they face different institutional settings. Most large Chinese firms, including publicly listed ones, remain state-controlled by the central government. Many of these are public utilities and natural resources firms, such as China Petroleum & Chemical Corporation (SinoPec Corp.), Baoshan Iron & Steel Co., Ltd. (Bao Steel), and China Unicom. All of these firms are controlled by the *State-owned Assets Supervision and Administration Commission of the State Council* (SASAC). Typically, a Party Committee directly oversees each company's management; and a member of the Party Committee typically chairs of the company's board.

Very large Chinese companies, even those listed on stock exchanges, are thus tied closely to the country's political elite, and are in many ways not really distinct entities from the Chinese State. Although power is officially decentralized by the transfer of "fourteen rights" (such as the use of retained earnings and operating decisions) to company managers, the State retains control over issues like mergers and asset transfers. Perhaps more importantly, the real power in these firms is their Party Committees, which are appointed by the central government. This situation renders discussions about the protection of their property rights somewhat off the mark. Moreover, the same government entity often appoints the Party Committees of many different firms. These perhaps ought to be regarded as a single unit, a business group, for many purposes – perhaps including the assignment of property rights. For example, SASAC through party committees and appointed management boards controls 168 state-owned groups, some of which also controls collections of listed firms (China Resource Groups).

Then there are companies spun out from "township and village" cooperative enterprises. In 2003, there were 22478 TVEs in China according to the *China Statistics Yearbook*. Some were large and successful, and 48 were even publicly listed (as of 2001). Listed TVEs – like Wangxian Qianchao Co. Ltd, and Shandong Nanshan Industrial Co. Ltd – are probably in situations similar to those of central government controlled firms.

Small and medium sized Chinese companies, however, can be subjected to discretionary partial and complete expropriation, especially in regions where government is of low quality – for example where Party cadres are poorly educated, corrupt, or where the bureaucracy is highly rigid. Such governments can levy surcharge fees arbitrarily and unexpectedly. They can seize firms' goods and services by purchasing on credit but never paying.

Ultimately, China may well provide a better institutional environment for FDI operations than for domestic operations – large or small, state controlled or privately run. If China, more than other countries, favors FDI in this way, it might well receive an elevated FDI inflow. But this is nothing to brag about, nor is it indicative of a useful "Chinese model". If this line of argument is correct, the elevated FDI flowing into China reflects foreign firms seizing investment opportunities that would have gone to domestic firms if China had better institutions across the board.

Options on Institutions

Another possibility is that foreign corporate investors might see China as likely to undertake further institutional development that will enshrine effective constraints on executive power. From this perspective, China's FDI inflow might be slightly elevated relative to that predicted given its current checks on executive power, but not given its likely future checks. In a sense, foreigners are investing in China in anticipation of improved institutions. Of course, this is a bet, for Chinese institutions might not improve. But such bets can be sound investments; for their upside potential can greatly outweigh their downside risks. Indeed many corporate investments

derive part of their value from such *real options*. Chinese FDI might seem elevated only because it includes investment in this sort of "bet" as well as investment based on current conditions.

On having 'attitude'

A final possible interpretation we see of the different prediction errors is a real divergence about what empirically matters. Our constraints on executive power variables are technical experts' assessments about the structures of governments. The *rule of law* variable, as mentioned above, has both a "law" component and an "order" component. The former refers to the impartiality of the legal and political establishment in judicial matters; while the latter refers to the extent to which residents of the country are willing to accept the established legal and political institutions to make and implement laws and to adjudicate disputes.

Constraints on executive power in China may not be as strong as elsewhere, but foreign investors may accept this because of a general pragmatic attitude prevalent in China. Abrupt changes in policies may occur when populist leaders, such as Hugo Chavez of Venezuela or Evo Morales of Bolivia, are elected. Perhaps an absence of democracy mitigates weak restraints on executive power if the executives seem firmly committed to an FDI friendly policy.

Given our findings, these lines of argument would seem to provide the only scope for China being "exceptional". While we cannot deny their validity, the other explanations for the systematic nature of the regression errors in Table 3 seem, to us, at least as plausible.

8. So Is "Too Much" FDI Flowing into China?

Probably not.

We have shown that, within China, inward FDI flows disproportionately into provinces with less corrupt governments and governments that better protect private property rights. We estimate a cross-country FDI model, without China, that explains inward FDI using measures of

the strength of constraints on executive power as well as more general measures of government quality and track record in fostering growth and a set of standard controls. This model predicts FDI flow into China with prediction errors similar to those for other countries with similar levels of institutional development, even though the Chinese prediction is out-of-sample and the predictions for other countries are in-sample. Moreover, some specifications almost perfectly predict China's FDI inflow.

There is indeed an enormous FDI flow into China, but given China's infrastructure and growth track record,,this flow is not far from what would be expected for a country at China's level of institutional development. China does not seem very "exceptional" in this light. Nor is China greatly evading the consequences of its weak institutional environment, for this certainly dampens the flow of FDI into China.

We do find that China seems to attract more FDI than the model predicts if we gauge government quality by constraints on executive actions. This might have fairly prosaic explanations: foreign firms might be betting on improved institutions in the future in China. Or, the strength of constraints on executive power might be underestimated by foreign assessors. Or foreign firms might be better protected from capricious executive actions in China than the country's government structure would indicate because special institutional settings protect them with unique checks on arbitrary official actions. If so, foreign operations might genuinely experience better institutional environments in China than otherwise identical Chinese controlled operations next door. This "edge" provided foreign investors might artificially elevate China's FDI inflow. But this sort of "exceptionality" is hardly an attractive development model. If these explanations could somehow be discounted, and we think this unlikely, this finding alone might argue for China attracting an exceptional FDI flow. We cannot rule this out, but we think Ockham's razor cuts against it.

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Table 1. Key Statistics for China, the Former East Bloc, and Latin America
Figures are averages over 1990 through 2004, and across all countries in Latin American and the former East Bloc for those regions.

	China	Former East Bloc	Latin American
Economic performance			
Per capita GDP (US dollars at PPP)	3292.7	6471.8	5456.9
Average annual GDP growth	8.7%	1.2%	1.1%
Foreign investment			
Inward FDI per capita (US Dollars)	$30.38	$83.22	$80.48
Inward FDI as a fraction of GDP	4.3%	3.8%	2.8%
Institutional development			
Respect for the rule of law*	4.6	4.4	3.0
Control of Corruption	2.8	3.4	2.8
Responsible Government	-7.0	3.2	7.5
Constraints on executive power	3.0	4.4	6.1

* Respect for the rule of law is the average of 1990 to 2002.

Table 2. Summary statistics China and Comparison Countries

	Weak institution countries				China after 1990			
Variable	*sample*	*mean*	*median*	*strd dev.*	*sample*	*mean*	*median*	*strd dev.*
Foreign direct investment								
FDI per capita	849	26.35	6.94	55.98	13	30.38	33.62	10.42
Limits on Executive Power								
Executive constraints	517	3.79	3	2.27	13	3	3	0
Responsible government	519	0.15	-2	6.83	13	-7	-7	0
General institutional quality								
Rule of Law	697	2.58	2.42	1.1	11	4.63	5	0.65
Control of corruption	697	2.69	3	1.03	11	2.83	2	1.37
Government track record								
Expected growth	849	0.01	0.02	0.02	14	0.05	0.04	0.01
GDP growth standard dev.	849	0.01	0.02	0.02	14	0.05	0.04	0.01
General development								
Log of per capita GDP	849	6.68	6.77	1.04	14	6.56	6.59	0.33
Log(mean years of school)	849	1.08	1.19	0.66	14	1.7	1.7	0.04
Telephones per 1000 people	849	34.26	13.85	44.62	13	74.46	56.2	64.64
Other characteristics								
Log of population	849	2.71	2.37	1.34	14	7.11	7.12	0.04
Exchange rate	849	0.54	0.5	0.4	14	0.93	1	0.14
Manufacturing share of GDP	849	27.15	25.8	9.64	14	48.78	49.47	2.76
Services share of GDP	849	49.39	49.05	9.91	14	32.7	33.01	1.37
Regime durability	520	2.18	2.3	1.04	13	3.89	3.89	0.08

Table 3. Regressions Explaining FDI Allocation across Countries

Dependent variable in all regressions is log constant (80) plus per capita FDI inflow.

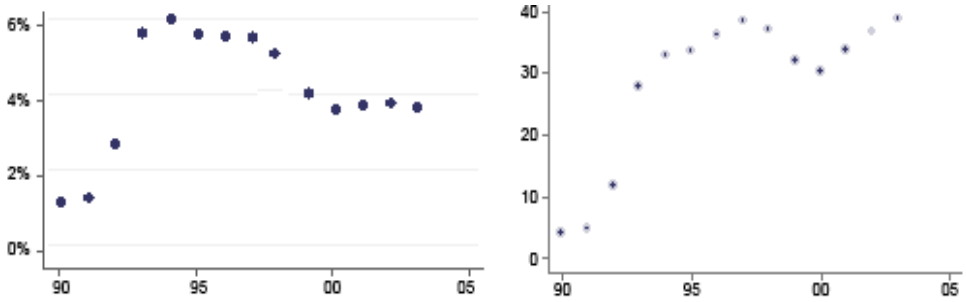
	(3.1)	(3.2)	(3.3)	(3.4)
Limits on Executive Power				
Executive constraints	0.032			
	(1.82)*			
Responsible government		0.016		
		(2.10)*		
General government quality				
Rule of Law			-0.015	
			(0.59)	
Control of corruption				0.018
				(0.99)
Government track record				
Expected growth	2.523	2.062	2.467	2.105
	(2.19)**	(1.98)*	(3.50)***	(2.29)**
GDP growth standard dev.	-0.753	-0.240	-0.538	-0.815
	(2.41)**	(0.59)	(1.66)	(1.52)
General development				
Log of per capita GDP	0.211	0.182	-0.079	-0.012
	(2.94)**	(3.59)***	(2.43)**	(0.21)
Log(mean years of school)	-0.016	-0.033	0.079	0.003
	(0.39)	(0.71)	(2.48)**	(0.06)
Telephones per 1000 people	0.003	0.003	0.004	0.005
	(1.77)*	(4.42)***	(3.64)***	(3.26)***
Other characteristics				
Log of population	-0.052	-0.026	-0.056	-0.063
	(1.64)	(0.83)	(2.85)***	(2.00)*
Exchange rate	-0.130	-0.151	0.011	0.218
	(3.02)***	(5.07)***	(0.12)	(1.56)
Manufacturing share of GDP	-0.009	-0.009	0.001	0.006
	(1.52)	(1.50)	(0.40)	(1.52)
Services share of GDP	-0.005	-0.000	0.005	0.003
	(1.58)	(0.04)	(1.70)*	(0.73)
Regime durability	-0.001	0.013		
	(0.02)	(0.60)		
Regression fit				
Observations	428	431	587	602
Regression R-squared	0.65	0.68	0.51	0.69
Fit for China – Mean residual	0.33	0.39	0.20	0.03

, **, and * represent statistical significance at the 10, 5, and 1 percent. t-stat in parentheses. Standard errors are adjusted for country-level clustering and time fixed effects are included, but their coefficients are suppressed. Regime durability is available only for the polity IV sample; adding this variable in columns 3 and 4 would dramatically reduce the sample. The constant 80 is being added to FDI per capita to take into account the fact that some FDI inflows have negative value.*

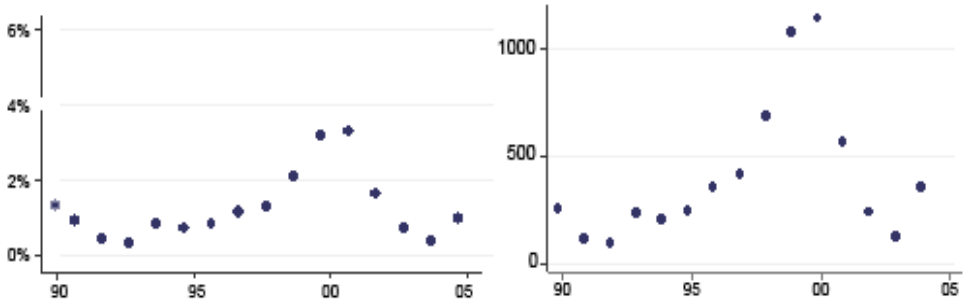
Figure 1. Foreign Direct Investment Inflows to China, the US and the World

Foreign direct investment inflow is expressed as a percentage of gross domestic product in the left-hand column of graphs and per capita (in US dollars deflated to 2000 and converted at purchasing power parity exchange rates) in the right-hand column of graphs.

Panel A. Chinese Foreign Direct Investment Inflow



Panel B. US Foreign Direct Investment Inflow



Panel C. World Average Foreign Direct Investment Inflow

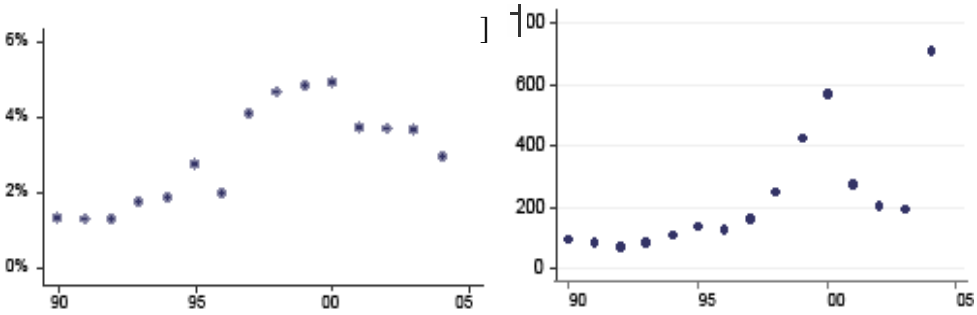


Figure 2. Entertainment and Travel Costs versus Prosperity

Each observation represents a Chinese province. Prosperity is gauged by per capita GDP in yuan is averaged over 1998 through 2003. Entertainment expenses are the proportion of 2003 company expenses classified as "entertainment and traveling costs" expressed as a fraction of 2003 sales, averaged by head office city. Provincial figures are averages across cities located in that province.

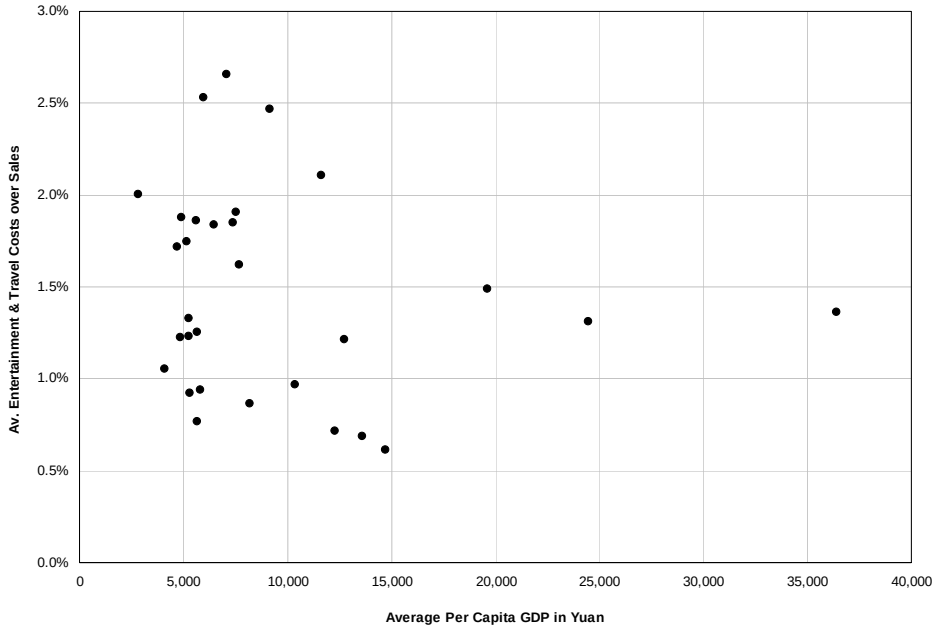


Figure 3. Private Property Rights Protection and Prosperity

Each observation represents a Chinese province. Prosperity is gauged by per capita GDP in yuan is averaged over 1998 through 2003. Private property rights protection is the fraction of the time surveyed business executives report that private property rights are protected in disputes with the State.

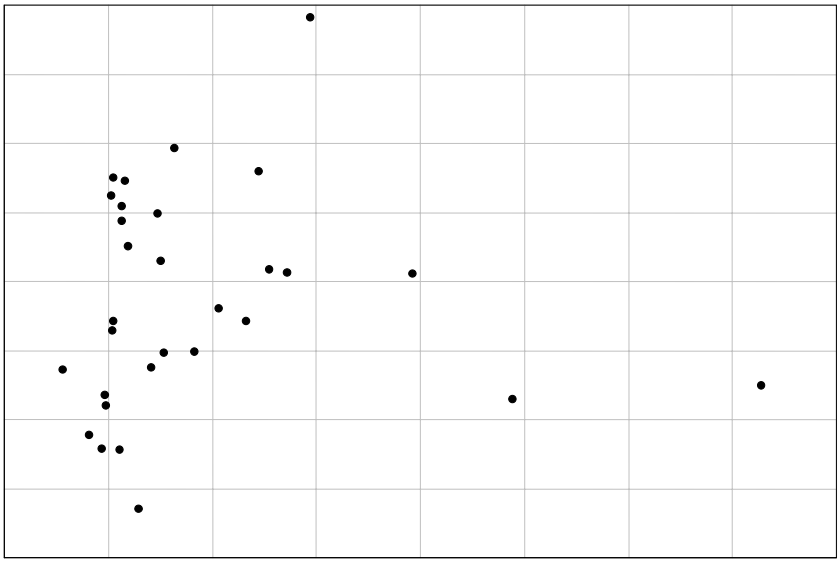


Figure 4. Entertainment and Travel Costs versus Growth

Each observation represents a Chinese province. GDP growth is averaged over 1998 through 2003. Entertainment expenses are the proportion of 2003 company expenses classified as "entertainment and traveling costs" expressed as a fraction of 2003 sales, averaged by head office city. Provincial figures are averages across cities located in that province. The slope black line is an OLS estimated trend line.

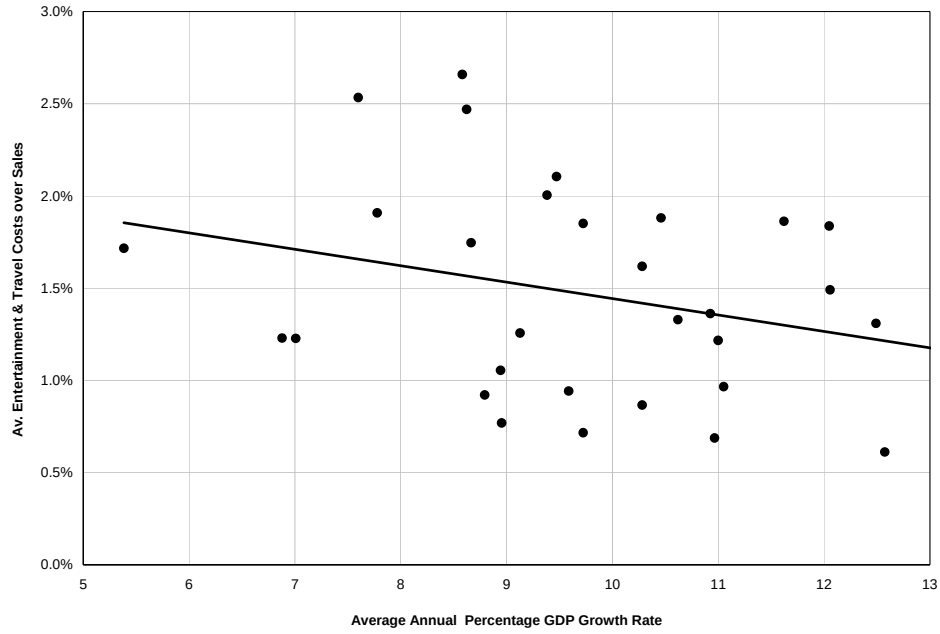


Figure 5. Private Property Rights Protection and Growth

Each observation represents a Chinese province. GDP growth is averaged over 1998 through 2003. Private property rights protection is the fraction of the time surveyed business executives report that private property rights are protected in disputes with the State.

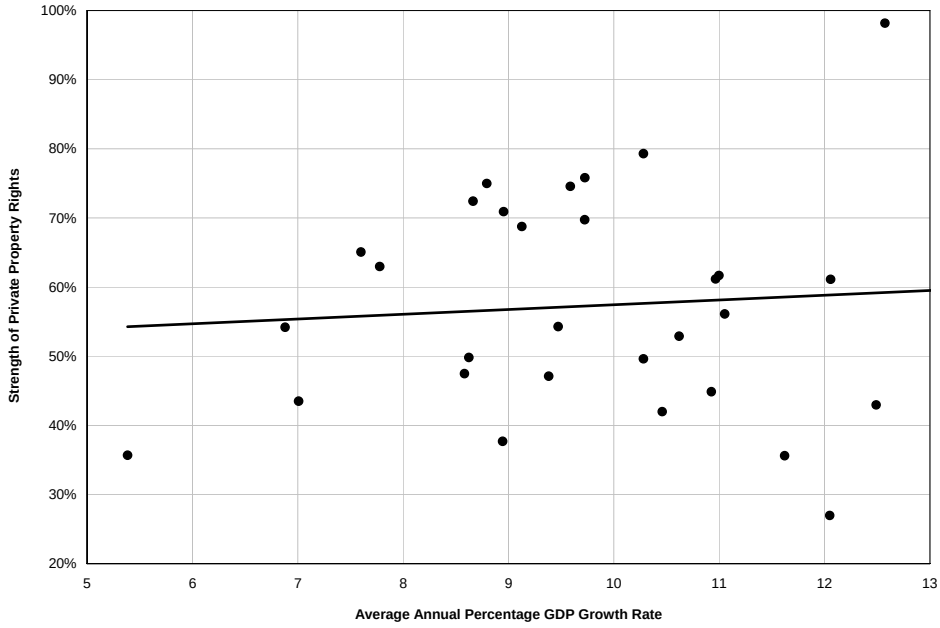


Figure 6. Private Property Rights and Foreign Direct Investment

Foreign direct investment in each Chinese province, on the horizontal axis, is measured as a fraction of gross domestic product. Private property rights protection in that province, on the vertical axis, is the fraction of the time surveyed business executives report that private property rights are protected in disputes with the State. Values graphed are after partialing out the effect of per capita GDP.

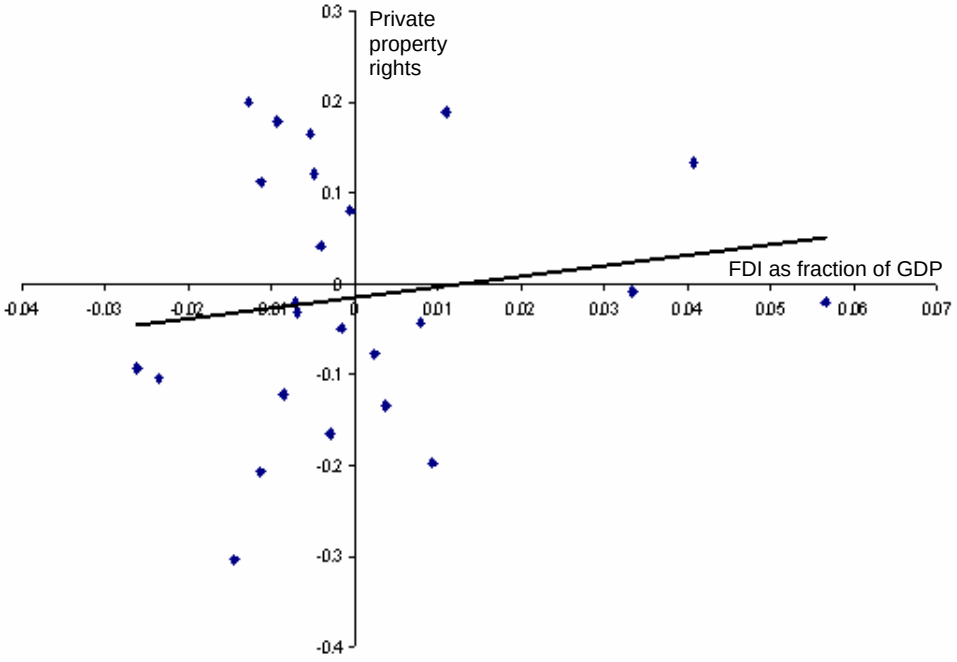


Figure 7. Entertainment and Travel Costs versus Foreign Direct Investment

Foreign direct investment in each Chinese province, on the horizontal axis, is measured as a fraction of gross domestic product. Entertainment expenses are the proportion of 2003 company expenses classified as "entertainment and traveling costs" expressed as a fraction of 2003 sales, averaged by head office city. Provincial figures are averages across cities located in that province. Values graphed are after partialing out the effect of per capita GDP.

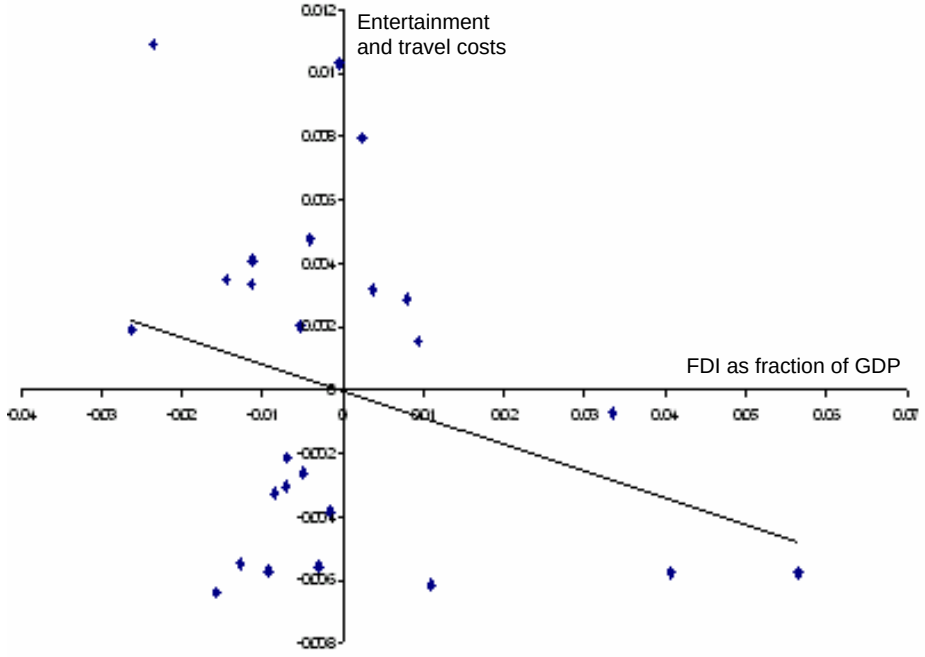


Figure 8. Errors using *responsible government* to predict FDI inflow

Residuals from using regression 3.2, which gauges the quality of government with the *responsible government* score, to predict FDI inflow into China (out-of-sample prediction) and into various other weak-institution countries (in-sample predictions).

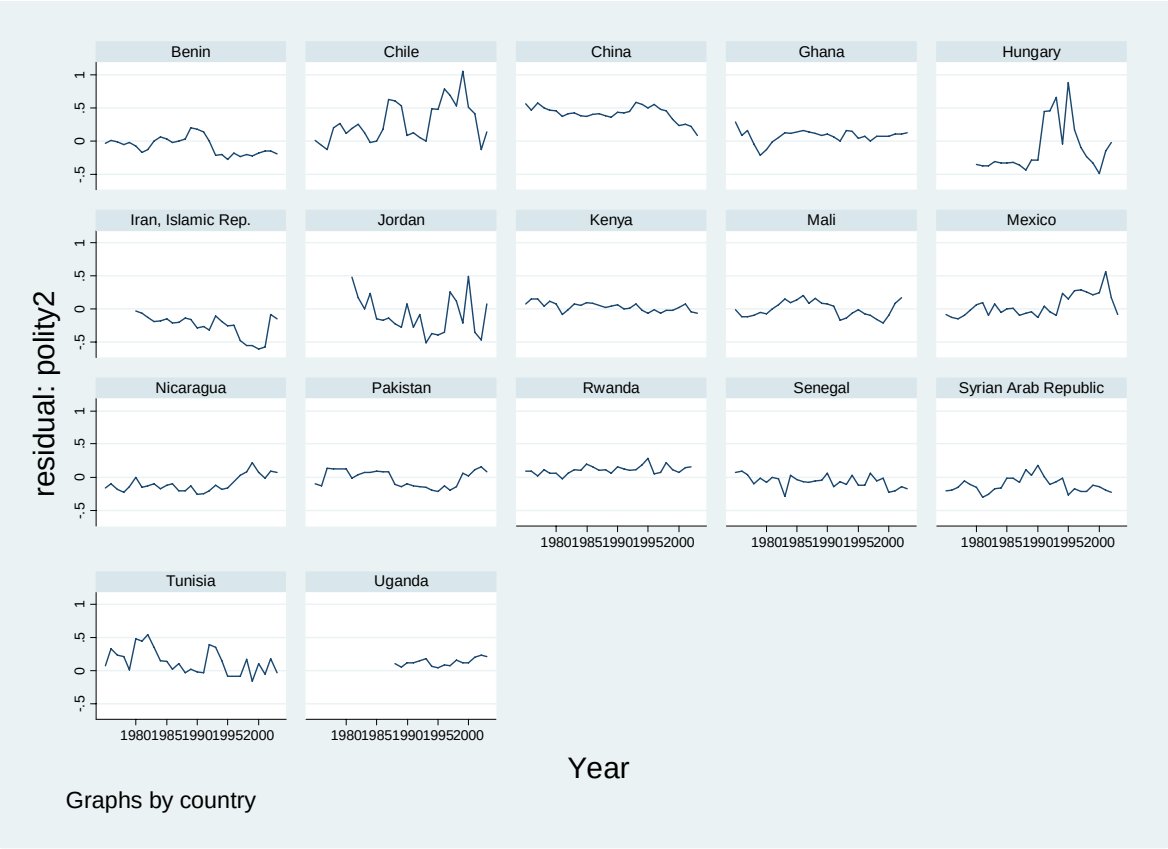


Figure 9. Errors using *control of corruption* to predict FDI inflow

Residuals from using regression 3.4, which gauges the quality of government with the *control of corruption survey* score, to predict FDI inflow into China (out-of-sample prediction) and into various other weak-institution countries (in-sample predictions).